Environmental Management Systems City of Winchester

An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. An EMS is a continual cycle of planning, implementing, reviewing and improving the processes and actions that an organization undertakes to meet its business and environmental goals. The City's EMS is built on the "Plan, Do, Check, Act" model. This model leads to continual improvement based upon:

Planning, including identifying environmental aspects and establishing goals [plan];

Implementing, including training and operational controls [do];

Checking, including monitoring and corrective action [check]; and

Reviewing, including progress reviews and acting to make needed changes to the EMS [act].

EMS's allow organizations to systematically manage their environmental and health safety matters. EMS's can result in both business and environmental benefits, including:

Improved environmental performance;

Enhanced compliance;

Pollution prevention and conservation of resources;

Reduced/mitigated risks;

Correction of conditions that hinder sustainable environments:

Increased efficiency/reduced costs;

Improved employee awareness of environmental issues and responsibilities.

The City of Winchester's EMS strives to challenge and empower each individual City employee to proactively promote environmental leadership. We are committed to continuously improve our environmental management practices through the promotion of the environmental stewardship principles of conservation, co-operation, environmental compliance and risk reduction, and restoration. The City began implementation of its EMS in March of 2002. We are pursuing a phased approach with the ultimate goal of the EMS being a City-wide program.

Key Elements of an EMS: A Snapshot

- **Environmental policy** Develop a statement of your organization's commitment to the environment. Use this policy as a framework for planning and action.
- Environmental aspects Identify environmental attributes of your products, activities and services. Determine those that could have significant impacts on the environment.
- **Legal and other requirements** Identify and ensure access to relevant laws and regulations, as well as other requirements to which your organization adheres.
- **Objectives and targets** Establish environmental goals for your organization, in line with your policy, environmental impacts, the views of interested parties and other factors.
- Environmental management program Plan actions necessary to achieve your objectives and targets.
- **Structure and responsibility** Establish roles and responsibilities for environmental management and provide appropriate resources.
- **Training, awareness and competence** Ensure that your employees are trained and capable of carrying out their environmental responsibilities.
- **Communication** Establish processes for internal and external communications on environmental management issues.
- EMS documentation Maintain information on your EMS and related documents.
- **Document control** Ensure effective management of procedures and other system documents.
- **Operational control** Identify, plan and manage your operations and activities in line with your policy, objectives and targets.
- Emergency preparedness and response Identify potential emergencies and develop procedures for preventing and responding to them.
- **Monitoring and measurement** Monitor key activities and track performance. Conduct periodic assessments of compliance with legal requirements.
- Nonconformance and corrective and preventive action Identify and correct problems and prevent their recurrence.
- **Records** Maintain and manage records of EMS performance.
- **EMS audit** Periodically verify that your EMS is operating as intended.
- **Management review** Periodically review your EMS with an eye to continual improvement.

EMS Definitions

Activities and Services: The whole spectrum of operations, routine and otherwise, that the City of Winchester undertakes in the course of the administration of the municipality.

Continual Improvement: Process of enhancing the environmental management system to achieve improvements in overall environmental performance in line with the organization's environmental policy."

Environment: Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation. NOTE -- Surroundings in this context extend from within an organization to the global system.

Environmental Aspect: Element of an organization's activities, products or services that can interact with the environment. NOTE -- A significant environmental aspect is an environmental aspect that has or can have a significant environmental impact.

Environmental Impact: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.

Environmental Management System: The part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.

Environmental Management System Audit: A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organization's environmental management system conforms to the environmental management system audit criteria set by the organization, and for communication of the results of this process to management.

Environmental Objective: Overall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantifiable where practicable.

Environmental Performance: Measurable results of the environmental management system, related to an organization's control of its environmental aspects, based upon its environmental policy, objective and targets.

Environmental Policy: Statement by the organization of its intentions and principles in relation to its overall environmental performance that provides a framework for action and for the setting of its environmental objectives and targets.

Environmental Target: Detailed performance requirement quantified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.

Interested Party: Individual or group concerned with or affected by the environmental performance of an organization.

Organization: Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own

functions and administration. NOTE -- For organizations with more than one operating unit, a single operating unit may be defined as an organization.

Other Requirements: Rules and guidelines that the City of Winchester abides by but which are not legally binding under existing environmental laws. Other requirements may include voluntary initiatives to which the City is committed (e.g., industry standards or guidelines). Under the EMS, these additional commitments have the same level on influence on activities and operation as legal requirements.

Pollution Prevention: Use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution. NOTE -- The potential benefits of prevention of pollution include the reduction of adverse environmental impacts, improved efficiency and reduced costs.

Regulations: The set of legal requirements that apply to the City of Winchester.

Significance Criteria: The set of measures, both environmentally/sustainability and business related, used to quantify the importance of the environmental aspects of the activities and services of the City of Winchester.

Sources of Legal and Other Requirements

Regulatory Agencies (Program and Website Location)

United States Environmental Protection Agency (USEPA)

http://www.epa.gov/

Virginia Department of Environmental Quality (VDEQ)

http://www.deq.state.va.us/

Occupational Safety and Health Administration (OSHA)

http://www.osha.gov/

United States Department of Transportation

http://www.dot.gov/

Virginia Department of Health (VDH)

http://www.vdh.state.va.us/

Virginia Department of Agriculture and Consumer Services (VDACS)

http://www.vdacs.state.va.us/

Regulatory Subscriptions

Business & Legal Reports, Inc. – Environmental Compliance, Federal and State

Business & Legal Reports, Inc. – The Environmental Manager's Compliance Advisor

Regulatory Internet Sites

Federal Register

http://www.access.gpo.gov/nara/cfr/index.html

Virginia General Assembly, Legislative Information System

http://leg1.state.va.us/lis.htm

Local Government Environmental Assistance Network (LGEAN)

http://lgean.org/index.cfm

International City/County Management Association (ICMA)

http://www2.icma.org/

Newsletters & Trade Magazines

Core Engineered Solutions (Fuel and Chemical Storage Specialists)

Ouarterly Newsletter received via email and available at

http://coreengineeredsolutions.com/newsletter.htm

Stormwater, The Journal for Surface Water Quality Professionals http://www.stormh2o.com/

Other

Public Entity Environmental Management System Resource Center (PEER) http://www.peercenter.net/index.cfm